NCDENR
North Carolina Department of Environment and Natural Resources
Division of Coastal Management
James H. Gregson
Director

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

March 23, 2009

Joe Christopher, Regional Supervisor
Leasing and Environment (MS 5410)
Minerals Management Service -Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123–2394

Re: Comments on Geological and Geophysical Exploration (G&G) on the Atlantic Outer Continental Shelf (OCS) - PEIS Scope

Dear Mr. Christopher:

I am writing in response to the Notice of Intent to prepare a Programmatic Environmental Impact Statement (PEIS) and Call for Interest for Future Industry Geological and Geophysical Activity on the Atlantic Outer Continental Shelf published in January 21, 2009 Federal Register. I appreciate the opportunity to offer the following comments to aid the Minerals Management Service (MMS) in determining the significant issues and alternatives for analysis in the PEIS.

As stated in the Description of Geological and Geophysical Activities published by MMS, seismic surveys have the potential for "significant" impacts on the marine environment including physical and acoustic impacts on marine life. North Carolina's coastal and ocean resources are an integral part of the State's economy, supporting thriving fishing and tourism industries. In analyzing seismic survey impacts, it will be imperative that the PEIS address the effects on fish and fish habitat including sub-lethal behavioral changes due to mechanically and electrically generated acoustic sources. These impacts could possibly include changes in feeding behavior, interruption of spawning behavior and effects from episodic acoustic events.

With regard to fish habitat, North Carolina's continental shelf consists primarily of rock covered with a thin veneer of sand less than two meters thick. When these "hard bottom" areas are exposed, they can be covered with living or dead encrusting organisms such as corals and other invertebrates. The complex three-dimensional structure offered by hard bottoms provide excellent habitat for reef fish. Due to the habitat potential, all of the hard bottoms in the south Atlantic are designated by the National Marine Fisheries Service as Essential Fish Habitat under the Sustainable Fisheries Act of 1994. Beyond the edge of the continental shelf (greater than 600m) there have recently been discovered, areas of deep water corals including *Lophelia* and *Enalopsammli*. Since deep penetration, deep-tow side scan sonar and electromagnetic surveys

involve towed cables or receivers placed on the sea floor, the PEIS must address physical impacts to these habitats. As the deep-water corals are especially fragile, activities in an around these communities, particularly the use of deep-tow side scan sonar utilizing a chain dragged along the seafloor, must avoid these areas to preserve this biological community.

The Division of Coastal Management appreciates the opportunity to comment on this issue and encourages the Minerals Management Service to coordinate with other North Carolina environmental agencies to ensure that all relevant issues are included in the PEIS.

Sincerely,

James H. Gregson, Director

cc: Dee Freeman
Robin Smith
Steve Wall